



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:** David Moyer

**Docket No.:** SPNE0002

**Serial No. :** 10/674,743

**Art Unit:** 2832

**Filed:** 9/29/2003

**Examiner:** Unknown

**Title:** Electromagnetic Valve System

February 19, 2004

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents

Mail Stop DD

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- (X) under 37 CFR 1.97(b), or  
(within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ( ) under 37 CFR 1.97(c) together with either a:
  - ( ) Certification under 37 CFR 1.97(e), or
  - ( ) a \$220.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ( ) under 37 CFR 1.97(d) together with a:
  - ( ) Certification under 37 CFR 1.97(e), and
  - ( ) a \$220.00 fee under 37 CFR 1.17(d)(2)(ii), and
  - ( ) a \$130.00 petition fee set forth in 37 CFR 1.17(i)(1)  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

(X) The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 07-1445 (Order No. SPNE0002). A copy of this sheet is enclosed for accounting purposes.

(X) Applicant(s) submit herewith Form PTO 1449 -- Information Disclosure Citation together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.25.

( ) A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 156(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

Respectfully Submitted,



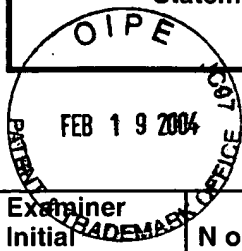
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Form 1449 (Modified)

Information Disclosure  
Statement By Applicant

Atty. Docket No. SPNE0002  
Serial No. 10/674,743  
Applicant: Moyer, et al  
Art Unit: Unassigned  
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Examiner: Unassigned



U.S. Patent Documents

Examiner Initial	No.	Patent No	Issued	Patentee	Class	Sub-class	Filing Date
	A	2001/0006049	7/05/2001	Buehrle, et al	123	90.12	1/16/2001
	B	5,970,956	10/26/1999	Sturman	123	508	2/13/1997
	C	6,024,060	2/15/2000	Buehrle, II et al	123	90.12	6/05/1998
	D	6,026,771	2/22/2000	Escobosa	123	90.12	5/24/1999
	E	6,173,684	1/16/2001	Buehrle, II et al	123	90.12	1/10/2000
	F	6,302,068	10/16/2001	Moyer	123	90.11	6/05/2000
	G	6,360,728	3/26/2002	Sturman	123	508	8/05/1999
	H	5,975,052	11/02/1999	Moyer	123	406.23	6/01/1998
	I	6,047,673	4/11/2000	Lohse, et al	123	90.11	4/07/1999
	J	6,260,525	7/17/2001	Moyer	123	90.16	3/6/2000
	K	6,302,068	10/26/2001	Moyer	123	90.11	6/05/2000
	L	6,302,069	10/16/2001	Moyer	123	90.11	11/08/2000
	M	6,631,633	10/14/2003	Garg, et al	73	1.57	11/02/2000
	N	6,631,699	10/14/2003	Lutz, et al	123	90.15	12/20/2001
	O	6,308,670	10/30/2001	Hammond et al	123	90	7/6/2000
	P	6,553,961	4/29/2003	Hammond et al	123	308	12/5/2000
	Q	6,349,685	2/26/2002	Kolmanovsky et al	123	90.11	5/9/2000
	R	6,357,409	3/19/2002	Haghgooie et al	123	179.3	5/23/2000
	S	6,397,797	6/4/2002	Kolmanovsky et al	123	90.11	12/8/2000
	T	6,432,129	8/13/2002	DiCaprio	623	1.11	2/22/2000
	U	6,532,919	3/18/2003	Curtis et al	123	90.11	12/8/2000
	V	6,572,074	6/3/2003	Yang, et al	251	54	4/18/2001

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	W	912819	7/09/1997	EP	F01L	9/02	X	
	X	245798	5/02/1996	EP	F01L	9/02	X	
	Y	99/58822	11/18/1999	WO	F01L	9/02	X	
	Z	02/46582	6/13/2002	WO	F01L		X	
	aa	803026	11/30/1995	EP	F02M	51/06	X	
	bb	830496	5/02/1996	EP	F01L	9/02	X	

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	cc	Tai, C., et al; <u>Control of an Electromechanical Camless Valve Actuator</u> ; Dept. of Mechanical and Aerospace Engrg; Univ of California at Los Angeles; Los Angeles, CA; Proceedings of the American Control Conference; May 8-10, 2002; Anchorage, Alaska, USA.
	dd	Auto Channel Search Web Page; 'Camless Technology Update'; <a href="http://www.theautochannel.com">www.theautochannel.com</a> ; ©1996-2003 The Auto Channel.
	ee	Automotive Engineering Web Page; 'Tech Briefs'; <a href="http://www.sae.org">www.sae.org</a> ; ©2003 SAE.
	ff	Mackoski, Dusko; 'Camless Engines' A near future where camshafts don't exist and performance is revolutionised!; ©1998-2003; AutoWeb Pty Limited & Web Publications Pty, Ltd.
	gg	Web Page Camless Engine (car: engine: valves).
	hh	Johansen, T.A., et al; <u>Free-Piston Diesel Engine Timing and Control-Towards Electronic Cam- and Cranshaft</u> ; Dept of Engr Cybernetics, Norwegian Univ of Science and Technology, N-7491 Trondheim, Norway.
	ii	Denver Business Journal Web Page; Neff, T.; <u>Sturman's valve opens door to potential riches</u> ; 9/24/2001; Denver Business Journal Saturday November 22 issue.
	jj	Machinedesign.com Today is: November 22, 2003 Web Page; 'Camless engines give "Peak" performance'.
	kk	Camless Engine Homepage; 'Camless Engine Theory'.
	ll	AARG Homepage; 'Current Prototype'; Dept. of Mechanical Engineering, Univ of South Carolina; USA.
	mm	Puchalsky, C., et al; <u>Modelica Applications for Camless Engine Valvetrain Development</u> ; 2 <sup>nd</sup> Intn'l Modelica Conference Proceedings, pp.77-86; Modelica Association 2002, March 18-19, 2002.
	nn	Web Page; <u>Sturman DHOS™ Valve Actuation Module</u> ; Technology, Leading the Mechanical World Into the Digital Age; © 2000, 2001 Sturman Industries, Inc.
	oo	Garg, V.K. et al; U.S. Patent No. 6,631,633, dated October 14, 2003; <u>Method and Apparatus for Calibrating a Variable force Solenoid</u> ; USPTO Patent Full-Text and Image Database.
	pp	Lutz, M. et al; U.S. Patent No. 6,631,699, dated October 14, 2003; <u>Air fuel Module</u> ; USPTO Patent Full-Text and Image Database.
	qq	<a href="mailto:rhl@onemail.com">rhl@onemail.com</a> (email); Subect: other people's camless sites; 11/15/2003.
	rr	Wang, T, et al.; <u>Modeling and Control of Electromechanical Valve Actuator</u> "; Copyright ©2002 Society of Automotive Engineers, Inc.
	ss	Sturman, Carol, "Dare To Dream" Leader to Leader, Winter, 2002, pg. 35.
	tt	Sturman Industries a Family Affair" Front Range TechBiz, November 12-18, 2001, pg. 9.